Peabody, Daniel (EGLE)

From: Peabody, Daniel (EGLE)

Sent: Wednesday, June 10, 2020 11:49 PM

To: Ruesch, Paul; Daniel M. Capone (DCapone@manniksmithgroup.com)

Cc: Ruhala, Sydney (EGLE); Roberts, Keegan; Bennett, Brian

Subject: RE: Area 4 TCRA PDI/FSP DRAFT for Review

Attachments: Copy of Comment Form PDI FSP reviewers consolidated as of 061020_EGLE UPDATE.xlsx

Paul,

Attached are EGLE's comments on the Area 4 PDI. Sorry for the delay but thank you for your patience. As I said today most of the comments I had were the same ones we sent over a few weeks back and a lot of the rest were already captured by the group. I did not duplicate comments but did add "/ EGLE" in a couple of the comment boxes where we had similar comments that I wanted to reinforce. Everything I added is in red so you can quickly see it. Please let me know if you have any questions.

Thanks,

Daniel Peabody

Environmental Quality Analyst
Remediation and Redevelopment Division
Michigan Department of Environment, Great Lakes, and Energy

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From: Ruesch, Paul <ruesch.paul@epa.gov> Sent: Tuesday, June 09, 2020 9:02 PM

To: dcapone@manniksmithgroup.com; Mills, Mark (DNR) < MILLSM@michigan.gov>; Saric, James

<saric.james@epa.gov>; Schultz, Karl <karl.schultz@tetratech.com>; Von Wallmenich, Theo/DET

<Theo.VonWallmenich@jacobs.com>; Peabody, Daniel (EGLE) <PeabodyD@michigan.gov>

Cc: greg.baker@noaa.gov; Miller, Mark (MSP) < MillerM@michigan.gov>; Lantinga, Christopher (EGLE)

<LantingaC@michigan.gov>; Julie Sims <Julie.sims@noaa.gov>; Williams, Lisa Lisa_williams@fws.gov>;

robertsk@cdmsmith.com; Roth, Charles <roth.charles@epa.gov>; kernstat@gmail.com; Scott Kirchner

<jjolly@geiconsultants.com>; Axtell, Beth <baxtell@geiconsultants.com>

Subject: RE: Area 4 TCRA PDI/FSP DRAFT for Review

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Good Evening Area 4 PDI/FSP Reviewers –

Please find attached consolidated comments which were passed along to GEI this evening. We plan to discuss and resolve these issues in person with GEI over the next couple of days in Otsego, so this plan can be finalized and carried out next week as planned.

Paul Ruesch

On Scene Coordinator

U.S. EPA Region 5 Superfund Division 77 W. Jackson Blvd. (SE-5J) Chicago, Illinois, USA 60604-3590

Office: 312-886-7898 Cell: 312-919-4382 ruesch.paul@epa.gov

From: Ruesch, Paul

Sent: Friday, May 22, 2020 12:25 PM

To: dcapone@manniksmithgroup.com; MILLSM@michigan.gov; vpeabodyd@michigan.gov; Saric, James

<saric.james@epa.gov>; karl.schultz@tetratech.com; theo.vonwallmenich@jacobs.com

Cc: greg.baker@noaa.gov; millerm@michigan.gov; lantingac@michigan.gov; julie.sims@noaa.gov;

lisa williams@fws.gov; robertsk@cdmsmith.com; Roth, Charles <roth.charles@epa.gov>; kernstat@gmail.com;

<u>KirchnerSF@cdmsmith.com</u>; Canar, John <<u>canar.john@epa.gov</u>>; <u>BennettBJ@cdmsmith.com</u>; Jolly, John

<jjolly@geiconsultants.com>; Axtell, Beth <baxtell@geiconsultants.com>

Subject: Area 4 TCRA PDI/FSP DRAFT for Review

Good Afternoon & Happy Friday Team Trowbridge -

I hope everyone is doing OK and can relax/enjoy Memorial Day weekend.

EPA is in receipt of the **DRAFT Pre-Design Investigation Field Sampling Plan for the Area 4 Trowbridge Dam Area TCRA** from GEI Consultants on behalf of NCR Corporation.

It is too big to attach (33mB), so I posted it on the website at: https://response.epa.gov/trowbridgedam under 'Documents' (last document on the list). Remember that you need to 'Log In' (upper right hand corner of page) or this document will not appear on the list. Also, I advise you 'download' and then open it in Adobe rather than trying to open/launch it from the webpage. If you have trouble accessing it, let me know and I can remind you how to get there.

Please feel free to take a look at this document and share your thoughts/comments/feedback/ideas on the attached spreadsheet if possible, which will make it easier for me to consolidate and return to GEI. Check the address list on this email, and if there are others you feel could add value, please pass this email along to them.

My goal for comments back to GEI is June 5, so if you could try to get me your thoughts by June 5 that would be great.

Thanks for your interest, time and support.

Paul Ruesch
On Scene Coordinator
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	Trowbridge Dam TCRA							
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3	DOCUMENT NAME: DRAFT PDI/FSP, version 05/22/2020 REFERENCE TO GEI SUBMITTAL (i.e., CONTENTS (
4	ITEM NO.	REVIEWER	Section X.X, Page XX)	COMMENT (+ reference(s) to support)	SUGGESTION / RECOMMENDATION	GEI Response to Comments (date)		
5	1	PR	Abbreviations and Acronyms, p.i.	EGLE is missing	Add EGLE - Michigan Department of Environment, Great Lakes and Energy			
6	2	PR	General	the TCRA is not a 'remedial' action.	replace 'remedial' with 'removal' as specified in the pr markup file.			
7	3	DC	Section 1, paragraph 3, first sentence	sentence reads "describes the rationale for a remedial action in Area 4".	Change "remedial action" to "TCRA"			
8	4	DC	Section 1, paragraph 3, third sentence	the words "in certain areas" is confusing and not necessary	delete the words "in certain areas" from the sentence			
9	5	DC	Section 1, paragraph 4, fourth sentence	"The PDI will also collect geotechnical data"	change to "Geotechnical data will also be collected during the PDI"			
10	6	PR	Section 1, p.2	the QAPP is under revision based on SQAP input.	be sure to incorporate any modifications/edits based in the review into the PDI document.			
11	7	DC	Figure 2	Map should show (or provide separate map) the Area 4 TCRA boundary- which this FSP is addressing. Also would be helpful to have River Mile markers on this map.	Show Area 4 TCRA boundary on Fig 2 or provide additional figure			
12	8	K. Brown	Figure 2	Section 2.1	Suggest adding labels to figure (Subarea names and/or RMs). Tough to discern areas based on color alone.			
13	9	DC	Section 2.1, first full paragraph - Page 4	Please clarify which figures are being referred to in the sentence "The sampling figures outline expected "bankfull width" post dam removal"				
14	10	Canar	Section 2.1, p. 4, 3rd paragraph	"'Riverbank' is defined as the banks of the river from the top of bank to a setback of 25 feet."	Does this definition include the portion from the water's edge to the top of the bank? If so, the 25 feet is not included in this?			
15	11	K. Brown	Section 2.1, last paragraph	"Riverbank" is defined as the banks of the river from the top of bank to a setback of 25 ft. Does this mean top of bank at current condition, meaning the 25 ft setback may change as top of bank changes?				
16	12	DC	Section 2.2, first sentence	Field sampling will include surveying; sediment probing (poling); bank soil, in-stream sediment, and backwater sediment PCB data collection;	define the term "backwater sediment"			
17	13	DC	Section 2.2, first paragraph, last sentence	Sentence states that mussel survey and relocation will occur before PDI sampling.	Please clarify if mussel relocation will occur prior to PDI?			
18	14	EGLE	Section 2.1, pg 4 first full paragraph	As EGLE previously commented on, the bankful width in the figures appears narrower than would be expected based on other reaches of the river. At this point, insufficient information has been presented to support the bankful width of approximately 150 feet that is shown in the figure and other details of the channel design but GEI had expressed a willingness to explain the hydrualic and hydrodynamic modeling that was completed to support the river channel dimenstions.	Please provide explanation on how the bankful width, channel location, etc. was determined.			
19	15	EGLE	Section 2.2, Item #1	The Project Team needs to consider inundation frequency when determining when to apply sediment or soil criteria. Or, what would happen if water levels do not drop as low as expected and some of these subareas are still considered sediment. The aquatic sediment PRG should be applicable to wetlands with standing water that support fish and that are inundated for 1 or more months annually because the exposure pathway used for developing the sediment PRGs is present and complete (Application of Preliminary Remedial Goals to Wetlands based on Inundation, USEPA Memo from Dr. James Chapman to Shari Kolak, dated June 21, 2005). This may be applicable to other sections of Area 4 and other Areas of Operable Unit 5 (OUS).	Further discussion on how inundation is being considered in the text and future technical work group discussion on the applicability and protectiveness of sediment and soil criteria for areas that will potentially be inundated under a dam-out scenario.			
20	16	K. Brown/EGLE	Section 2.2, last paragraph	"Usability will be determined on a case-by-case basis and incorporated into the design basis as warrented."	How will usability be determined? Will EPA and others have a say in determining this?			
21	17	DC	Section 2.2,Bullet 1 page 4	Why is Subarea E not included in bullet 1? Section 2.1 bullet 3 states that Subarea E includes riverbank portions and in-stream sediments.	Please clarify. Alternatively include delineation of riverbank soil in bullet 3.			
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22	18	PR &DC	Section 2.2, p. 4	Refer to Figure 4 in the Action Memorandum, and Figures 4-12b, 4-13b, 4-15b, and 4-17b of the Area 4 SRI. There are in-stream sediment tubes w/ PCBs > 1 mg/kg identified in both Subareas C & D.				
23	19	PR &DC	Section 2.2, p. 4, bullet 4	need to explain why we are only cleaning up to 5 mg/kg in Subareas F&G	Should mention somewhere that GEI proposed, and EPA agreed to the 5 mg/kg cleanup standards for sediments in Subareas F & G.			
24	20	PR	Section 2.2, p.5	reference is made to use of SRI data without explanation of criteria or process to be used to determine usability	will further evaluation be conducted? by whom and how and when?			
25	21	DC	Section 2.2 first full paragraph, Page 5	Paragraph states tha the 2014-15 SRI data was considered as part of the sample design.	What about historical data collected prior to 2014-15? Please clarify			
26	22	EGLE	Section 2.2, pg 5, first full paragraph	The text suggests the SRI data (2014 and 2015) may not represent the current condition based on certain lines of evidence (the age of the data, bathy, etc.) and also because the river is dynamic. But, the SRI data is still being used to inform and focus PDI sampling. If the SRI data is not representative why would it be used to bias decision making (i.e. sample spacing, density, reoccupation, etc.)? Giving more weight to the SRI vs pre-SRI data (i.e. completely eliminating all pre-SRI data from consideration) doesn't really seem to make sense because neither likely represents the current condition but, collectively, all the data provides information that we should review and consider as we move into design. For example, there is no reason to suspect that pre-SRI samples collected from banks that haven't eroded away no longer exist. The SRI Report and ASTM used all data (pre-SRI and SRI) for the floodplain footprints.	The use of data should be discussed amongst the technical group.			
27	23	EGLE	Section 2.2, pg 5, last paragraph	Low bias is not mentioned as a "usable criteria" for SRI data yet we understand the analytical data from Pace is biased low, very low.	How is the low bias in Pace data being accounted for in the pre- design sampling?			
28	24	DC	Section 2.3, first bullet	Information in this bullet implies that older data collected prior to 2014-15 SRI will be utilized to support design of Area 4 TCRA. This appears to conflict with statement in Section 2.2.	Please clarify.			
29	25	KB &DC	Section 3 General	The sampling approach does not address how islands will be addressed in the PDI (islands exist in Subarea C, Subarea E -near Trowbridge Dam, and Subareas F and G)	Suggest adding bank sampling locations to islands or at a minimum discussion of how islands will be characterized in PDI.			

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30	26	DC	Section 3.1 Poling, second paragraph	Sentence discusses poling at in-stream borings in subareas E, F, and G. Subareas C and D should also be included as there are limited stream tubes in mid channel in these subareas.	add Subareas C&D		
31	27	EGLE	Section 3.1 Poling	When collecting poling and core data in proximal locations, the deepest depth should be used to determine the sediment thickness. This would be consistent with how sediment thicknesses are interpreted in other Areas of OUS and historically in Area 4.	Consider adding language to use the deepest penetration depth from the coring and poling locations as the interpreted sediment thickness.		
32	28	DC	Section 3.2 Edge Transect Sampling in Areas C and D	Section does not describe how instream sediments (stream tubes from historical data showing > 1mg/kg PCBs) will be addressed or characterized. Edge sampling (5 and 10 feet from the banks) will not address the areas covered by the stream tubes. There is at least one mid-stream tube in subarea D (Figure 4 from PDI FSP shows historical sediment location near sample point E39)	add discussion of how sediments in subareas C and D will be further characterized to address historical concerns and add sampling points		
33	29	PR & DC	Section 3.2, p. 7 & p. 9	The sentence "Samples from these cores will help refine the vertical and horizontal extent of PCB-impacted sediment exceeding the cleanup standard of 5 mg/kg" implies the cleanup standard for sediments in Subareas C&D = 5 mg/kg	the cleanup standard for PCB-impacted sediments in Subareas C&D remains 1 mg/kg.		
34	30	Roth / EGLE	Section 3.2, p.7, Edge transect sampling	The spacing of 350 ft seems large when making decisions at 50 ft.	The interpolation method does not need to be determined ahead of time. Several interpolators should be used and evaluated to determine which fit the data the best. If the data are to be interpolated the floodplain data should be included in the analysis since they concentrations in the floodplain are likely also representative of nearby bank concentrations.		
35	31	PR	Section 3.2, p. 8	edge transect spacing of 350' may not be adequate to define 50' removal grids	we need to discuss this spacing, it is too much to adequately delineate excavation grids unless it will be interpolated with SRI transect data.		
36	32	Roth	3.2, p.7, Edge transect sampling	The nearest bank sample is 10 ft from the water. If the purpose of the bank sampling is to determine if PCBs will be eroded into the river then the nearest sample should be closer to the water's edge	The nearest sample should be 5 ft or less from the water's edge		
,,,	33	Canar	Section 3.2, p. 8, 1st paragraph	"bank transects spaced approximately 350 feet."	That means decision units of 350 feet if only using the newer PDI data. The decision units for instream is either 75 feet or 100 feet. Why so different? Previous bank decision unit was 250 feet.		

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3 D	OCUMEN	DCUMENT NAME: DRAFT PDI/FSP, version 05/22/2020						
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8	34	Canar & DC	Section 3.2, p. 8, last paragraph	Bank samples are: 0–12-inch, 12–24-inch, and 24–36-inch	Previous bank samples were every 6 inches in the top foot (i.e. 0-6 inches, 6-12 inches). Now you have a "support" issue, i.e., new samples have twice the vertical influence of historical samples. How will this be handled?			
,	35	EGLE	Section 3.2, p. 8, first full paragraph	The reference to native material is used in numerous areas of the PDI Work Plan.	Please provide a discussion on why sampling depths are proposed to stop once native material is reached. Please provide examples of local conditions that would be indicative of native material/lack of sediment accumulation. How will this determination be made consistently among field staff? An overview of the current conceptual site model would be helpful here.			
)	36	DC	Section 3.2, p. 9, last paragraph	"The results of the PDI edge transect data will be evaluated as described in Section 6 to define the bank segments requiring remedial action."	Should include bank segments and in-stream sediments requiring removal action.			
1	37	EGLE	Section 3.2, p. 9, first sentence	It should be recognized that the fluvial geomorphology is typically characterized by localized deposits that represent repeated episodes of erosion and deposition. As a result, the assumption that deeper soils will not exceed 5 ppm, if the upper soils do not, may not always hold true. Further, there appears to be a good amount of reliance on SRI data to design the PDI sampling including data density, reoccupation of locations, etc. The low bias in the SRI data and decision to not include pre-SRI data could ultimately lead to a removal action that does not achieve cleanup targets if the PDI does not consider all of the information currently available	The heterogeneity of PCB concentrations should be discussed in the documents and the SRI and historical data should be considered throughout the PDI process. Pre- SRI, SRI, and post- SRI data should be used. SRI data should be relied upon with some caution as the data is potentially biased substantially low.			
2	38	EGLE	Section 3.3, p. 9, first paragraph	Similar comment. The PDI states the SRI data is not representative of current conditions yet the SRI data is being used to aid in design of the PDI. The heterogeneity (and potential low bias of the SRI data) of PCB concentrations needs to be considered.	Please provide further explanation for this decision. Why not use a 100x100 ft grid for the entire area?			
	39	DC	Section 3.3, Subarea E Sampling	There is no bank transect sampling proposed for subarea E. Figure 3 of the Action Memo anticipated bank removal for subareas C, D, and E based on historical data.	PDI should propose bank transects for subarea E.			
	40	Canar	Section 3.3, p. 10, 2nd paragraph	"Each core will be processed by compositing material at standardized 12-inch intervals for the full length of sediment recovered."	Previous sediment samples were every 6 inches in the top foot. Now you have a "support" issue, i.e., new samples have twice the vertical influence of historical samples. How will this be handled?			
	41	PR	Section 3.4, p. 10	There may be areas within Subareas F&G that remain submerged due to the influence of feeder streams that will connect with the river channel.	need to discuss after design whether or not certain feeders in Subareas F&G need to be cleaned up to 1 mg/kg			
	42	Canar	Section 3.4, p. 12, 2nd paragraph	"Each core will be processed by compositing material at standardized 12-inch intervals for the full length of sediment recovered."	Previous sediment samples were every 6 inches in the top foot. Now you have a "support" issue, i.e., new samples have twice the vertical influence of historical samples. How will this be handled?			
7	43	Roth / EGLE	Section 3.5, p. 12, Identifying areas>50 ppm	Areas where >50 ppm have occurred do not need to be resampled for confirmation. A single sample at < 50ppm does not demonstrate that the >50 no longer exists.	These areas should be sampled with a gridded spatial design to identify where areas over 50 ppm are currently.			
	44	K. Brown	Section 3.5	Sampling in Areas Previously Shown to Contain PCBs >= 50 mg/kg. Locations identified are from SRI dataset, however, data exists from other sources (historical) that indicate >= 50 mg/kg at other locations.	Evaluate all available data sets and add additional sampling locations where historical data indicated PCBs >50 mk/kg as necessary.			
	45	DC	Section 3.5, p-13, last paragraph	Following the completion of the sediment and bank boring program, all locations having results ≥50 mg/kg PCB will be considered for additional sampling to further define the horizontal and vertical extent of such impacts.	Please add discussion as to how the additional sampling will be conducted to define the horizontal and vertical extent of PCBs >50 mg/kg.			

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50	46	PR	Section 3.6, p. 13	Consider borings at the top of bank on the LDB downstream of the dam. This bank is eroding at an accelerated rate currently, and may be subject to further erosion once the new channel is directed along the LDB at the existing dam corridor.	add geotechnical borings as needed downstream of the dam to the 26th Street bridge	
51	47	PR	Section 4.1, p. 15	sediment coring subcontractor is not identified	specify who will be doing this work and their experience in prior sampling/investigations of this type.	
52	48	PR	Section 4.4, p. 16, Section 4.5, p. 19	missing SOP reference for sample interval processing	reference subject SOP for interval processing, including homogenization technique	
53	49	EGLE	4.4.1 & 4.4.2	EGLE has concern about using a vibecore on the Kalamazoo River for sediment sampling based on our experience using a vibecore system. In general vibecores are good for softer, wetter, and finer sediments but will not penetrate sandy materials unless the head has substantial weight. In other Areas of OUS, the PRPs have used a percussion-based corer to ensure they can penetrate the variable substrate; however, care must be taken with that method to ensure adequate	The SOPs include other coring methods. It may be beneficial to modify the PDI to allow for flexibility in the coring method depending on the substrate. Consider utilizing a contractor that has multiple coring options available for a vessel that can navigate the Kalamazoo River.	
54	50	DC	Section 5.1, p. 21	How will field duplicate samples be labelled?	Field duplicates should be labelled in a manner that does not identify the sample as a duplicate for the lab purposes.	
55	51	PR	Section 5.1, p. 21	need to inlude EGLE, who will also be taking spilt samples	EPA will also fill containers with split samples on behalf of EGLE. EPA will store these samples separately and transfer under chain-of-custody to an EGLE representative who will pack and ship to the EGLE analytical lab.	
56	52	DC	Section 5.1, p. 21	"Samples will be split at the core processing facility and placed into containers with unique split IDs as provided by EPA."	Add a statement that sample splitting with EPA/EGLE will occur after thorough homoginization of the sample interval is complete.	
57	53	DC	Section 6.1.1 and 6.1.3 General	Consider also utilizing PDI bank sample data to evaluate creation of 10 foot buffer zone during bank restoration work that contains soils that are <1 mg/kg total PCBs.	This issue was a lesson learned during the Area 3 TCRA implementation.	
58	54	DC	Section 6.1.1 and 6.1.2	Both sections contain the statement "Due to changes in bathymetry since prior sampling, the depth intervals and to a lesser extent spatial location of previous results may no longer be accurate."	Perhaps adding a discussion of what the observed changes in the bathymetry are since the 2014/15 SRI would be helpful for the reader to better understand this statement	
59	55	EGLE	Section 6.1.1 and 6.1.3	If the bathymetry data suggests conditions have changed how is the bathy data being used to inform sampling?	Perhaps adding a discussion of what the observed changes in the bathymetry are and how that was used to inform sampling would be helpful.	
60	56	K. Brown	Section 6.1.1 Subarea E Sediment Data	This section describes the creation of a TIN for the sediment top surface and generating a TIN for remedation surface. What interpolation methods will be considered for use to interpolate the analytical results for the remediation surface.	Suggest adding more detail similar to section 6.1.2.	
61	57	DC	Section 6.1.1	What about Subarea E bank soil data - how will this data be utilized?	Add discussion of Subarea E bank soil sample results	
62	58	PR / EGLE	Section 6.1.1, p. 23, Section 6.1.2, p. 24, Section 6.1.3, p. 24	statement on including SRI data for design purposes not adequately explained	This statement warrants further explanation, as it implies criteria which will be used in considering inclusion of SRI data or not.	
63	59	PR	Section 6.1.3, p. 24	edge transect spacing of 350' may not be adequate to define 50' removal grids	we need to discuss this spacing, it is too much to adequately delineate excavation grids unless it will be interpolated with SRI transect data.	

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64	60	Canar	Section 6.1.3, p. 25, 2nd paragraph	"Bank soil data will be evaluated using nearest-neighbor interpolation because the data configuration does not lend itself to geostatistical processing."	Spatially, nearest-neighbor is often a lousy interpolator. Why not use existing flood plain and bank data and krige or use Natural Neighbor. Certainly to contrast with nearest-neighbor.			
65	61	PR	Section 6.1.4, p. 25	consider borings at the top of bank on the LDB downstream of the dam. This bank is eroding at an accelerated rate currently, and may be subject to further erosion once the new channel is directed along the LDB at the existing dam corridor.	Consider geotechnical investigation downstream of the current dam (especially on the LDB) to the 26th Street bridge.			
66	62	DC	Tables 1a through 1g	Consider adding primary sample collection procedure for each sample location ID on the table.				
67	63	DC	Table 2	Add Bank/Edge transect locations for Subarea E as discussed in earlier comments				
68	64	K. Brown	All figures with sampling G (Figures 5, 6, and 7)	The grid ID is difficult to determine on figures that contain different sized grids.	Suggest adding short labels to each proposed sample point so it is clear what the Grid ID actually is.			
69	65	Canar	Figures 3 and 4	Background: Ruesch said banks not sampled will have 6" layer removed and have confirmation sampling	two choices: accept the previous bank areas >= 5ppm OR resample all banks. Can't re-sample >= 5ppm banks and then possibly reduce the areas requiring action if you're not willing to do the same samping in bank areas <5ppm			
70	66	Canar	Figure 9		No proposed sampling in the portion from the water's edge to the top of the bank. This area likely have as much or more PCB than beyond the top of the bank. Why no samples?			
71	67	DC	General	Will any electronic field collection data tools be utilized during the PDI?	If so, add a description of the tools proposed for electronic field data collection			
72	68	Canar	General		GEI will need to develop a post-removal baseline sampling plan and that plan should be developed to serve as a template for longterm monitoring, LTMP.			
73	69	DC	SOP P-019 Sediment Core Processing, Section 3.2	Recommend a more scripted process for sample homoginization since this is such a key issue for sample splits.	For Area 3 TCRA, homoginization process was scripted and detailed to ensure that all processors followed the same homoginization process			
74	70	EGLE	QAPP Work Sheet 11, DQOs	The Data Quality Objectives describe evaluating conditions within the entireity of the proposed TCRA footprint and identifying locations within each of the that subareas exceed threshold values and are subject to removal. However, the PDI design may not meet the DQOs since it relies heavily on only the SRI data. At this time we understand the SRI data is not representative of the current condition and is biased low.	EGLE believes the PDI should cast a broader net over the TCRA footprint, which would require refining the proposed sample spacings, considering but not relying solely on SRI data, and reviewing other lines of evidence (i.e. pre-SRI data, bathymetry, biotoxicity sampling, etc.) to inform the PDI			
75	71	EGLE	QAPP Work Sheet 11, Define Boundaries of Data Collection	There appears to be a lot of variation in the investigation depths with little/no explanation for the variation.	Please provide an explanation for the variation in target depth.			
76	72	EGLE	QAPP Work Sheet 11, Analytical Approach	The text states, "The analytical methods for bank soils and sediments are the following: PCBs (Aroclor) by EPA Method 8082A; percent moisture" but the Action Memo and clean-up levels are based on total PCBs. EGLE notes that inaccurate measurements of total PCBs from several labs running the Aroclor method have been observed over the last few years. At this time there is currently talk about standardizing a laboratory method but the overall impact on data accuracy is currently unknown.	How will GEI ensure that the total Aroclor measurements are accurate so that actions taken achieve criterion based on total PCBs?			
77	73	Canar	General		Where is information about electronic data deliverables (e.g., geospatial, analytical)? Will be in another document?			